



AMENDMENT UNDER 37 C.F.R. § 1.114(c)
U.S. Application No. 10/661,476

Atty. Docket No. Q77425

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. (currently amended): A method of fabricating an aluminum nitride (AlN) substrate for use as a support for electronic components, comprising:

 dissolving an oxide precursor in an organic solvent to form a solution, wherein said oxide precursor is an organometallic substance;

 dispersing AlN powder in said solution with vigorous agitation to form a suspension;

 atomizing said suspension in an inert atmosphere to obtain a powder comprising AlN grains covered with a layer of said oxide precursor; **and**

providing a metal support;

providing an attachment sublayer on said metal support; and

 spraying said powder obtained after atomization onto [[a]] said attachment sublayer of said metal support, wherein said oxide precursor yields an oxide forming a liquid phase around said AlN grains during said spraying.

2. (original): The fabrication method claimed in claim 1, wherein said powder is sprayed by means of a plasma torch.

3. (original): The fabrication method claimed in claim 1, wherein said powder is sprayed by means of a flow of air associated with an oxyacetylene torch.

4. (canceled).

5. (previously presented): The fabrication method claimed in claim 1, wherein said oxide is a rare earth oxide.

6. (previously presented): The fabrication method claimed in claim 1, wherein said oxide precursor is an yttrium oxide precursor, and said powder obtained after atomization comprises an equivalent of 2% to 3% by weight of yttrium oxide.

7. (previously presented): The fabrication method claimed in claim 6, wherein said yttrium oxide precursor is yttrium isopropionate dissolved in propanol.

8. (previously presented): The fabrication method claimed in claim 1, wherein said substrate is obtained by a plurality of passes over said support as a function of required thickness.

9. (currently amended): The fabrication method claimed in claim 1, wherein said support is ~~a metal support and is cooled by jets of compressed air during said step of spraying said powder.~~

10. (currently amended): The fabrication method claimed in claim 1, wherein said substrate obtained by spraying said powder onto said attachment sublayer of said metal support is annealed.

11. (canceled).

12. (previously presented): The fabrication method claimed in claim 1, wherein said AlN powder to be dispersed in said solution with vigorous agitation has a grain diameter on the order of from 2 μm to 3 μm .

13. (previously presented): The fabrication method claimed in claim 1, wherein said powder obtained by atomizing said suspension in an inert atmosphere comprises hollow spheres having a diameter of from 40 μm to 150 μm .

14. (previously presented): The fabrication method claimed in claim 13, further comprising screening said powder having a diameter of from 40 μm to 150 μm to obtain a powder consisting of hollow spheres having a diameter of from 50 μm to 100 μm .

15. (canceled).

16. (new): The fabrication method claimed in claim 1, wherein the fabricated AlN substrate has a thickness of from 0.1 mm to 0.5 mm.